

## ABSTRACT OF THE DISCLOSURE

An evaporator and condenser unit for use in distilling a liquid, such as water, includes a rotary heat exchanger plate having a plurality of folds or pleats. Adjacent panels of the folded plate define spaces between their oppositely facing surfaces, and these  
5 spaces are alternatingly configured as evaporating and condensing chambers. The evaporating chambers, moreover, are defined between adjacent panels that are joined at an outer diameter fold, while the condensing chambers are defined between adjacent panels that are joined at an inner diameter fold. The evaporating chambers are thus closed at their outer diameter ends and open at their inner diameter ends, while the condensing  
10 chambers are closed at their inner diameter ends and open at their outer diameter ends.